Luca Gemignani

List of Publications by Year
in descending order

81	858	623734	610901
papers	citations	14 h-index	24 g-index

87	87	87	256
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Comparison theorems for splittings of M-matrices in (block) Hessenberg form. BIT Numerical Mathematics, 2022, 62, 849-867.	2.0	2
2	Bezout-like polynomial equations associated with dual univariate interpolating subdivision schemes. Advances in Computational Mathematics, 2022, 48, 1.	1.6	2
3	Orthogonal Iterations on Companion-Like Pencils. Journal of Scientific Computing, 2022, 91, 1.	2.3	0
4	Computing the reciprocal of a Ï•-function by rational approximation. Advances in Computational Mathematics, 2022, 48, 1.	1.6	4
5	Fast QR iterations for unitary plus low rank matrices. Numerische Mathematik, 2020, 144, 23-53.	1.9	4
6	Efficient Reduction of Compressed Unitary Plus Low Rank Matrices to Hessenberg Form. SIAM Journal on Matrix Analysis and Applications, 2020, 41, 984-1003.	1.4	1
7	Accelerating the Sinkhornâ€“Knopp iteration by Arnoldi-type methods. Calcolo, 2020, 57, 1.	1.1	1
8	Efficient solution of parameterâ€dependent quasiseparable systems and computation of meromorphic matrix functions. Numerical Linear Algebra With Applications, 2018, 25, e2141.	1.6	3
9	Fast Hessenberg Reduction of Some Rank Structured Matrices. SIAM Journal on Matrix Analysis and Applications, 2017, 38, 574-598.	1.4	8
10	A real QZ algorithm for structured companion pencils. Calcolo, 2017, 54, 1305-1338.	1.1	6
11	Accurate polynomial root-finding methods for symmetric tridiagonal matrix eigenproblems. Computers and Mathematics With Applications, 2016, 72, 992-1001.	2.7	1
12	Exponential pseudo-splines: Looking beyond exponential B-splines. Journal of Mathematical Analysis and Applications, 2016, 439, 32-56.	1.0	21
13	Implicit QR for companion-like pencils. Mathematics of Computation, 2015, 85, 1753-1774.	2.1	8
14	A CMV-Based Eigensolver for Companion Matrices. SIAM Journal on Matrix Analysis and Applications, 2015, 36, 1046-1068.	1.4	7
15	Compression of unitary rank-structured matrices to CMV-like shape with an application to polynomial rootfinding. Journal of Computational and Applied Mathematics, 2015, 278, 326-335.	2.0	4
16	Implicit QR for rank-structured matrix pencils. BIT Numerical Mathematics, 2014, 54, 85-111.	2.0	11
17	On the simultaneous refinement of the zeros of H-palindromic polynomials. Journal of Computational and Applied Mathematics, 2014, 272, 293-303.	2.0	0
18	A constructive algebraic strategy for interpolatory subdivision schemes induced by bivariate box splines. Advances in Computational Mathematics, 2013, 39, 395-424.	1.6	6

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19	Block tridiagonal reduction of perturbed normal and rank structured matrices. Linear Algebra and Its Applications, 2013, 439, 3505-3517.	0.9	1
20	The Ehrlichâ€“Aberth method for palindromic matrix polynomials represented in the Dickson basis. Linear Algebra and Its Applications, 2013, 438, 1645-1666.	0.9	9
21	Modifications of Newtonâ€™s method for even-grade palindromic polynomials and other twined polynomials. Numerical Algorithms, 2012, 61, 315-329.	1.9	3
22	Implicit QR with compression. Indagationes Mathematicae, 2012, 23, 733-761.	0.4	13
23	From approximating to interpolatory non-stationary subdivision schemes with the same generation properties. Advances in Computational Mathematics, 2011, 35, 217-241.	1.6	28
24	On some classes of structured matrices with algebraic trigonometric eigenvalues. Applied Mathematics and Computation, 2011, 217, 7573-7578.	2.2	0
25	A fast implicit QR eigenvalue algorithm for companion matrices. Linear Algebra and Its Applications, 2010, 432, 2006-2031.	0.9	29
26	Solving Bezout-like polynomial equations for the design of interpolatory subdivision schemes. , 2010, , .		3
27	QR-factorization of Displacement Structured Matrices Using a Rank Structured Matrix Approach. , 2010, , 229-254.		1
28	From symmetric subdivision masks of Hurwitz type to interpolatory subdivision masks. Linear Algebra and Its Applications, 2009, 431, 1971-1987.	0.9	22
29	Efficient eigenvalue computation for quasiseparable Hermitian matrices under low rank perturbations. Numerical Algorithms, 2008, 47, 253-273.	1.9	14
30	Neville elimination for rank-structured matrices. Linear Algebra and Its Applications, 2008, 428, 978-991.	0.9	8
31	Fast QR factorization of Cauchy-like matrices. Linear Algebra and Its Applications, 2008, 428, 697-711.	0.9	5
32	The unitary completion and QR iterations for a class of structured matrices. Mathematics of Computation, 2008, 77, 353-378.	2.1	7
33	Structured matrix methods for polynomial root-finding. , 2007, , .		6
34	Fast QR Eigenvalue Algorithms for Hessenberg Matrices Which Are Rankâ€One Perturbations of Unitary Matrices. SIAM Journal on Matrix Analysis and Applications, 2007, 29, 566-585.	1.4	37
35	On the fast reduction of a quasiseparable matrix to Hessenberg and tridiagonal forms. Linear Algebra and Its Applications, 2007, 420, 86-101.	0.9	19
36	Structured eigenvalue problems for rational gauss quadrature. Numerical Algorithms, 2007, 45, 195-204.	1.9	3

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37	A unitary Hessenberg QR-based algorithm via semiseparable matrices. Journal of Computational and Applied Mathematics, 2005, 184, 505-517.	2.0	16
38	Solving quadratic matrix equations and factoring polynomials: new fixed point iterations based on Schur complements of Toeplitz matrices. Numerical Linear Algebra With Applications, 2005, 12, 181-189.	1.6	8
39	Structured matrix methods for CAGD: an application to computing the resultant of polynomials in the Bernstein basis. Numerical Linear Algebra With Applications, 2005, 12, 685-698.	1.6	11
40	Fast and stable QR eigenvalue algorithms for generalized companion matrices and secular equations. Numerische Mathematik, 2005, 100, 373-408.	1.9	69
41	Quasiseparable structures of companion pencils under the QZ-algorithm. Calcolo, 2005, 42, 215-226.	1.1	6
42	The Ehrlich--Aberth Method for the Nonsymmetric Tridiagonal Eigenvalue Problem. SIAM Journal on Matrix Analysis and Applications, 2005, 27, 153-175.	1.4	22
43	Orthogonal Rational Functions and Structured Matrices. SIAM Journal on Matrix Analysis and Applications, 2005, 26, 810-829.	1.4	25
44	Inverse power and Durand-Kerner iterations for univariate polynomial root-finding. Computers and Mathematics With Applications, 2004, 47, 447-459.	2.7	30
45	Rounding Error Analysis in Solving M-Matrix Linear Systems of Block Hessenberg Form. Numerical Algorithms, 2004, 36, 157-168.	1.9	0
46	Bernsteinâ€“Bezoutian matrices. Theoretical Computer Science, 2004, 315, 319-333.	0.9	32
47	Effective Fast Algorithms for Polynomial Spectral Factorization. Numerical Algorithms, 2003, 34, 217-227.	1.9	18
48	Direct and Inverse Eigenvalue Problems for Diagonal-Plus-Semiseparable Matrices. Numerical Algorithms, 2003, 34, 313-324.	1.9	15
49	A superfast solver for Sylvesterâ€™s resultant linear systems generated by a stable and an anti-stable polynomial. Linear Algebra and Its Applications, 2003, 366, 233-255.	0.9	1
50	Efficient and Stable Solution of M-Matrix Linear Systems of (Block) Hessenberg Form. SIAM Journal on Matrix Analysis and Applications, 2003, 24, 852-876.	1.4	3
51	Iterative refinement techniques for the spectral factorization of polynomials. , 2002, , .		1
52	Orthogonal rational functions and diagonal-plus-semiseparable matrices. , 2002, , .		10
53	A Lanczos-type algorithm for theQR factorization of regular Cauchy matrices. Numerical Linear Algebra With Applications, 2002, 9, 305-319.	1.6	15
54	Fast and stable solutionï¿½of banded-plus-semiseparable linear systems. Calcolo, 2002, 39, 201-217.	1.1	4

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55	Computations with infinite Toeplitz matrices and polynomials. Linear Algebra and Its Applications, 2002, 343-344, 21-61.	0.9	69
56	Structural and computational properties of possibly singular semiseparable matrices. Linear Algebra and Its Applications, 2002, 340, 183-198.	0.9	12
57	Factorization of analytic functions by means of Koenig's theorem and Toeplitz computations. Numerische Mathematik, 2001, 89, 49-82.	1.9	14
58	Efficient and stable solution of structured Hessenberg linear systems arising from difference equations. Numerical Linear Algebra With Applications, 2000, 7, 319-335.	1.6	8
59	Computing a Hurwitz factorization of a polynomial. Journal of Computational and Applied Mathematics, 2000, 126, 369-380.	2.0	4
60	Fast QR factorization of low-rank changes of Vandermonde-like matrices. Calcolo, 1999, 36, 1-15.	1.1	3
61	Fast fraction-free triangularization of Bezoutians with applications to sub-resultant chain computation. Linear Algebra and Its Applications, 1998, 284, 19-39.	0.9	13
62	A hybrid approach to the computation of the inertia of a parametric family of Bezoutians with application to some stability problems for bivariate polynomials. Linear Algebra and Its Applications, 1998, 283, 221-238.	0.9	3
63	Computing a Factor of a Polynomial by Means of Multishift LR Algorithms. SIAM Journal on Matrix Analysis and Applications, 1998, 19, 161-181.	1.4	5
64	GCD of polynomials and Bezout matrices. , 1997, , .		5
65	Chebyshev rational interpolation. Numerical Algorithms, 1997, 15, 91-110.	1.9	2
66	Polynomial root computation by means of the LR algorithm. BIT Numerical Mathematics, 1997, 37, 333-345.	2.0	2
67	A fast algorithm for generalized Hankel matrices arising in finite-moment problems. Linear Algebra and Its Applications, 1997, 267, 41-52.	0.9	4
68	Schur complements of Bezoutians and the inversion of block Hankel and block Toeplitz matrices. Linear Algebra and Its Applications, 1997, 253, 39-59.	0.9	9
69	A Fast Algorithm for Generalized Hankel Matrices Arising in Finite-Moment Problems. Linear Algebra and Its Applications, 1997, 267, 41-52.	0.9	0
70	Fast and stable computation of the barycentric representation of rational interpolants. Calcolo, 1996, 33, 371-388.	1.1	2
71	Computationally efficient applications of the Euclidean algorithm to zero location. Linear Algebra and Its Applications, 1996, 249, 79-91.	0.9	7
72	A fast iterative method for determining the stability of a polynomial. Journal of Computational and Applied Mathematics, 1996, 76, 1-11.	2.0	2

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73	Fast Parallel Computation of the Polynomial Remainder Sequence via BÃ©zout and Hankel Matrices. SIAM Journal on Computing, 1995, 24, 63-77.	1.0	25
74	Iteration schemes for the divide-and-conquer eigenvalue solver. Numerische Mathematik, 1994, 67, 403-425.	1.9	10
75	Solving Hankel Systems over the Integers. Journal of Symbolic Computation, 1994, 18, 573-584.	0.8	8
76	Rational interpolation via orthogonal polynomials. Computers and Mathematics With Applications, 1993, 26, 26-34.	2.7	9
77	On the Complexity of Polynomial Zeros. SIAM Journal on Computing, 1992, 21, 781-799.	1.0	13
78	Fast inversion of Hankel and Toeplitz matrices. Information Processing Letters, 1992, 41, 119-123.	0.6	8
79	Computing the inertia of bezout and Hankel matrices. Calcolo, 1991, 28, 267-274.	1.1	7
80	Improved parallel computations with matrices and polynomials. Lecture Notes in Computer Science, 1991, , 520-531.	1.3	5
81	On the Euclidean scheme for polynomials having interlaced real zeros. , 1990, , .		11